WHAT IS CLAIMED IS:

1. An input device comprising:

a first resistor and a second resister each having an equal size and shape extending in one direction and arranged in parallel to each other and each having a constant and equal resistance per unit length in longitudinal direction thereof; and

a processing unit configured to detect a conductive condition established between the first resistor and the second resistor,

wherein one terminal of the first resistor in the longitudinal direction thereof is configured to be applied with a first constant voltage and the other terminal of the first resistor is configured as a first voltage detecting position,

wherein one terminal of the second resistor in the longitudinal direction thereof is configured as a second voltage detecting position and the other terminal of the second resistor is configured to be either connected to ground or applied with a second constant voltage lower than the first constant voltage, and

wherein the processing unit detects the conductive condition between the first and the second resistors in accordance with voltage values at the first and the second voltage detecting positions.

2. The input device as claimed in claim 1, wherein the processing unit detects a conductive position between the first and the second resistors in accordance with the voltage values at the first and the second voltage detecting positions.

3. The input device as claimed in claim 2, wherein in case: a length of the first and the second resistors in the longitudinal direction is designated by L; a distance from the one terminal of the first and the second resistors to the first and the second conductive position is designated by Lx; the voltage value at the one terminal of the first resistor is designated by V1; the voltage value at the other terminal of the second resistor is designated by V2; the voltage value at the first voltage detecting position is designated by AD1; and the voltage value at the second voltage detecting position is designated by AD2, the processing unit calculates a position calculating value in which varies with the distance Lx for specifying the conductive position, from the relations among the variables L, Lx, V1, V2, AD1 and AD2.

4. The input device as claimed in claim 1, wherein the processing unit decides whether or not a potential difference between the first and the second voltage detecting position is no more than a predetermined value, to thereby detect the conductive condition.

5. The input device as claimed in claim 3, wherein the processing unit decides whether or not a potential difference between the first and the second voltage detecting position is no more than a predetermined value, to thereby detect the conductive condition,

wherein when the conductive condition is detected, the processing unit calculates the position calculating value from the relations among the variables L, Lx, V1, V2, AD1 and AD2, and

wherein the processing unit decides which of a plurality of calculation value sections preset according to a plurality of switch positions configured on the first and the second resistors in the longitudinal direction the calculated position calculating value belongs to, to thereby decide which of the plural switch positions the conductive position corresponds to.

6. The input device as claimed in claim 1, wherein the processing unit decides which of a plurality of voltage sections preset for the first and the second voltage detecting positions individually in accordance with a plurality of switch positions configured on the first and the second resistors in the longitudinal direction the voltage values of the first and the second voltage detecting position belong to, to thereby decide which of the switch positions the conductive position corresponds

to.

7. The input device as claimed in claim 1, wherein the processing unit decides that the conduction between the first and the second resistors has not occurred, in case a value of (AD1 - AD2), which is calculated by subtracting the voltage value AD2 at the second voltage detecting position from the voltage value AD1 at the first voltage detecting position, exceeds a first preset reference value Vst,

wherein the processing unit decides that the conductive condition between the first and the second resistors is in a single conductive state, in which the conduction between the first and the second resistors occurs at one position in the longitudinal direction, in case the value of (AD1 - AD2) is no more than the first reference value Vst and no less than a preset second reference value Vmin (wherein Vmin < Vst), and

wherein the processing unit decides that the conductive condition between the first and the second resistors is in a plural conductive state, in which the conduction between the first and the second resistors occurs at a plurality of positions in the longitudinal direction, in case the value of (AD1 - AD2) is less than the second reference value Vmin.

8. The input device as claimed in claim 7, wherein when

the processing unit detects the plural conductive state, the processing unit detects each of the plurality of conductive positions in accordance with the voltage values of the first and the second voltage detecting position.

9. The input device as claimed in claim 1, wherein the processing unit decides that the conduction has occurred between the first and the second resistors, in case a value of (AD1 - AD2), which is calculated by subtracting a voltage value AD2 at the second voltage detecting position from a voltage value AD1 at the first voltage detecting position, is in range of between preset reference values Vmin and Vst (wherein Vmin < Vst), and

wherein the processing unit decides that the conduction between the first and the second resistors has not occurred, in case the value of (AD1 - AD2) is not in range of between the reference values Vmin and Vst.

10. The input device as claimed in claim 7, wherein when the processing unit detects the plural conductive state, the processing unit detects which of a plurality of voltage sections preset individually for the first and the second voltage detecting positions accordingly as the conduction occurs in any combination mode at each of a plurality of switch positions set for the first and the second resistors in the longitudinal direction the voltage values at the first and the second voltage detecting positions belong

to, to thereby decide which of the switch positions of the first and the second resistors the conduction has occurred at.

11. The input device as claimed in claim 1, wherein the processing unit decides which of a plurality of voltage sections preset individually for the first and the second voltage detecting positions accordingly as the conduction occurs in any combination mode at each of a plurality of switch positions set for the first and the second resistors in the longitudinal direction the voltage value at the first and the second voltage detecting positions belong to, to thereby decide which of the switch positions of the first and the second resistors the conduction has occurred at.

12. An input method for an input device having: a first resistor and a second resister each having an equal size and shape extending in one direction and arranged in parallel to each other and each having a constant and equal resistance per unit length in longitudinal direction thereof; and a processing unit configured to detect a conductive condition established between the first resistor and the second resistor, the method comprising:

applying a first constant voltage to one terminal of the first resistor in the longitudinal direction thereof;

configuring the other terminal of the first resistor

as a first voltage detecting position;

configuring one terminal of the second resistor in the longitudinal direction thereof as a second voltage detecting position;

either connecting the other terminal of the second resistor to ground or applying a second constant voltage lower than the first constant voltage to the other terminal of the second resistor; and

detecting the conductive condition between the first and the second resistors in accordance with voltage values at the first and the second voltage detecting positions.

13. The input method as claimed in claim 12, wherein in the detecting of the conductive condition, a conductive condition between the first and the second resistors is detected in accordance with the voltage values at the first and the second voltage detecting positions.

14. The input method as claimed in claim 13, wherein in case: a length of the first and the second resistors in the longitudinal direction is designated by L; a distance from the one terminal of the first and the second resistors to the first and the second conductive position is designated by Lx; the voltage value at the one terminal of the first resistor is designated by V1; the voltage value at the other terminal of the second resistor is designated by V2; the voltage value at the first voltage detecting

position is designated by AD1; and the voltage value at the second voltage detecting position is designated by AD2, in the detecting of the conductive condition, a position calculating value in which varies with the distance Lx for specifying the conductive position is calculated, from the relations among the variables L, Lx, V1, V2, AD1 and AD2.

15. The input method as claimed in claim 12, wherein in the detecting of the conductive condition, whether or not a potential difference between the first and the second voltage detecting position is no more than a predetermined value is decided, to thereby detect the conductive condition.

16. The input method as claimed in claim 14, wherein in the detecting of the conductive condition, whether or not a potential difference between the first and the second voltage detecting position is no more than a predetermined value is decided, to thereby detect the conductive condition,

wherein in the detecting of the conductive condition, when the conductive condition is detected, the position calculating value is calculated from the relations among the variables L, Lx, V1, V2, AD1 and AD2, and

wherein in the detecting of the conductive condition, which of a plurality of calculation value sections preset according to a plurality of switch positions configured

on the first and the second resistors in the longitudinal direction the calculated position calculating value belongs to is decided, to thereby decide which of the plural switch positions the conductive position corresponds to.

17. The input method as claimed in claim 12, wherein in the detecting of the conductive condition, which of a plurality of voltage sections preset for the first and the second voltage detecting positions individually in accordance with a plurality of switch positions configured on the first and the second resistors in the longitudinal direction the voltage values of the first and the second voltage detecting position belong to is decided, to thereby decide which of the switch positions the conductive position corresponds to.

18. The input method as claimed in claim 12, wherein in the detecting of the conductive condition, the conduction between the first and the second resistors is decided to not being occurred, in case a value of (AD1 - AD2), which is calculated by subtracting the voltage value AD2 at the second voltage detecting position from the voltage value AD1 at the first voltage detecting position, exceeds a first preset reference value Vst,

wherein in the detecting of the conductive condition, the conductive condition between the first and the second resistors is in a single conductive state, in which the

conduction between the first and the second resistors occurs at one position in the longitudinal direction, is decided, in case the value of (AD1 - AD2) is no more than the first reference value Vst and no less than a preset second reference value Vmin (wherein Vmin < Vst), and

wherein in the detecting of the conductive condition, the conductive condition between the first and the second resistors is in a plural conductive state, in which the conduction between the first and the second resistors occurs at a plurality of positions in the longitudinal direction, is decided, in case the value of (AD1 - AD2) is less than the second reference value Vmin.

19. The input method as claimed in claim 18, wherein when the plural conductive state in detecting of the conductive condition, each of the plurality of conductive positions in accordance with the voltage values of the first and the second voltage detecting position is detected.

20. The input method as claimed in claim 12, wherein in the detecting of the conductive condition, the conduction is decided to be occurred between the first and the second resistors, in case a value of (AD1 - AD2), which is calculated by subtracting a voltage value AD2 at the second voltage detecting position from a voltage value AD1 at the first voltage detecting position, is in range of between

preset reference values Vmin and Vst (wherein Vmin < Vst), and

wherein the conduction between the first and the second resistors is decided to not being occurred, in case the value of (AD1 - AD2) is not in range of between the reference values Vmin and Vst.

21. The input method as claimed in claim 18, wherein when the plural conductive state is detected in the detecting of the conductive condition, which of a plurality of voltage sections preset individually for the first and the second voltage detecting positions accordingly as the conduction occurs in any combination mode at each of a plurality of switch positions set for the first and the second resistors in the longitudinal direction the voltage values at the first and the second voltage detecting positions belong to, is decided, to thereby decide which of the switch positions of the first and the second resistors the conduction has occurred at.

22. The input method as claimed in claim 12, wherein in the detecting of the conductive condition, which of a plurality of voltage sections preset individually for the first and the second voltage detecting positions accordingly as the conduction occurs in any combination mode at each of a plurality of switch positions set for the first and the second resistors in the longitudinal

direction the voltage value at the first and the second voltage detecting positions belong to, is decided, to thereby decide which of the switch positions of the first and the second resistors the conduction has occurred at.

23. The input device as claimed in claim 1, wherein the processing unit decides that the conduction between the first and the second resistors has occurred, when a potential difference between the first and the second voltage detecting positions is below a preset first reference level; and

wherein the processing unit decides that the conduction between the first and the second resistors has ended, when the potential difference exceeds a second reference level preset higher than the first reference level.

24. The input device as claimed in claim 23, wherein the processing unit detects the conductive position between the first and the second resistors in the longitudinal direction, in accordance with the voltage values at the first and the second voltage detecting positions, for a time period from the detection of the occurrence of the conduction between the first and the second resistors to the detection of the end of the conduction.

25. The input device as claimed in claim 24, wherein the

processing unit performs the detection of the conductive position based on the voltage values at the first and the second voltage detecting positions, once, periodically by a plurality of times, or substantially continuously for the time period from the detection of the occurrence of the conduction between the first and the second resistors to the detection of the end of the conduction.

26. The input device as claimed in claim 24, wherein in case: a length of the first and the second resistors in the longitudinal direction is designated by L; a distance from the one terminal of the first and the second resistors to the first and the second conductive position is designated by Lx; the voltage value at the one terminal of the first resistor is designated by V1; the voltage value at the other terminal of the second resistor is designated by V2; the voltage value at the first voltage detecting position is designated by AD1; and the voltage value at the second voltage detecting position is designated by AD2, the processing unit calculates a position calculating value in which varies with the distance Lx for specifying the conductive position, from the relations among the variables L, Lx, V1, V2, AD1 and AD2.

27. The input device as claimed in claim 23, wherein for a time period from the detection of the occurrence of the conduction between the first and the second resistors to

the detection of the end of the conduction,

the processing unit decides that the conductive condition between the first and the second resistors is in a single conductive state, in which the conduction between the first and the second resistors occurs at one position in the longitudinal direction, in case the value calculated by subtracting the voltage valve at the second voltage detecting position from the voltage value at said first voltage detecting position is no more than the first reference value and no less than a preset third reference value lower than the first reference level, and

the processing unit decides that the conductive condition between the first and the second resistors is in a plural conductive state, in which the conduction between the first and the second resistors occurs at a plurality of positions in the longitudinal direction, in case the value is less than the third reference value.

28. The input device as claimed in claim 27, wherein the processing unit detects a plurality of conductive positions between the first and the second resistors in the longitudinal direction, in accordance with the first and the second voltage detecting positions, in case the plural conductive state is decided.

29. The input device as claimed in claim 27, wherein the processing unit decides, in case the plural conductive

state is decided, which of a plurality of voltage sections preset individually for the first and the second voltage detecting positions accordingly as the conduction occurs in any combination mode at each of a plurality of switch positions set for the first and the second resistors in the longitudinal direction the voltage value at the first and the second voltage detecting positions belong to, to thereby decide which of the switch positions of the first and the second resistors the conduction has occurred at.

30. The input method as claimed in claim 12, wherein in the detection of the conductive condition, the conduction between the first and the second resistors is decided to be occurred, when a potential difference between the first and the second voltage detecting positions is below a preset first reference level; and

wherein in the detection of the conductive condition, the conduction between the first and the second resistors is decided to be ended, when the potential difference exceeds a second reference level preset higher than the first reference level.

31. The input method as claimed in claim 30, in the detection of the conductive condition, the conductive position between the first and the second resistors in the longitudinal direction is detected, in accordance with the voltage values at the first and the second voltage

detecting positions, for a time period from the detection of the occurrence of the conduction between the first and the second resistors to the detection of the end of the conduction.

32. The input method as claimed in claim 31, wherein the detection of the conductive position based on the voltage values at the first and the second voltage detecting positions is performed, once, periodically by a plurality of times, or substantially continuously for the time period from the detection of the occurrence of the conduction between the first and the second resistors to the detection of the end of the conduction.

33. The input method as claimed in claim 31, wherein in case: a length of the first and the second resistors in the longitudinal direction is designated by L; a distance from the one terminal of the first and the second resistors to the first and the second conductive position is designated by Lx; the voltage value at the one terminal of the first resistor is designated by V1; the voltage value at the other terminal of the second resistor is designated by V2; the voltage value at the first voltage detecting position is designated by AD1; and the voltage value at the second voltage detecting position is designated by AD2, in the detecting of the conductive condition, a position calculating value in which varies with the distance Lx for

specifying the conductive position is calculated, from the relations among the variables L, Lx, V1, V2, AD1 and AD2.

34. The input method as claimed in claim 30, wherein in the detection of the conductive condition, for a time period from the detection of the occurrence of the conduction between the first and the second resistors to the detection of the end of the conduction,

the conductive condition between the first and the second resistors is decided to be in a single conductive state, in which the conduction between the first and the second resistors occurs at one position in the longitudinal direction, in case the value calculated by subtracting the voltage valve at the second voltage detecting position from the voltage value at said first voltage detecting position is no more than the first reference value and no less than a preset third reference value lower than the first reference level, and

the conductive condition between the first and the second resistors is decided to be in a plural conductive state, in which the conduction between the first and the second resistors occurs at a plurality of positions in the longitudinal direction, in case the value is less than the third reference value.

35. The input method as claimed in claim 34, wherein in the detection of the conductive condition, a plurality of

conductive positions between the first and the second resistors in the longitudinal direction is detected, in accordance with the first and the second voltage detecting positions, in case the plural conductive state is decided.

36. The input method as claimed in claim 34, wherein in the detection of the conductive condition, in case the plural conductive state is decided, which of a plurality of voltage sections preset individually for the first and the second voltage detecting positions accordingly as the conduction occurs in any combination mode at each of a plurality of switch positions set for the first and the second resistors in the longitudinal direction the voltage value at the first and the second voltage detecting positions belong to is decided, to thereby decide which of the switch positions of the first and the second resistors the conduction has occurred at.